

**Commonwealth of Kentucky**  
**Division for Air Quality**  
**PERMIT STATEMENT OF BASIS**

Title V (draft permit) No. V-98-010  
Lucas Varity Heavy Vehicle Braking Systems, Incorporated  
Carrollton, Kentucky 41008  
May 12, 1998  
Girish Kothari

**Source Description, control equipment, & construction date**

Carrollton Casting Division is a ductile iron foundry (and occasional gray iron) which produces wheel and hub castings for the tractor/trailer industry. The manufacturing process includes melting of scrap iron, green sand molding, cooling of molds in a cooling room using a shakeout drum to remove sand from castings, and a cleaning process to remove risers, clean castings, and perform grinding for final finish. The cast iron parts are then shipped off-site to several machine shops, including Carrollton Machine Center. The machine center processes include welding, riveting, grinding, drilling, heat treating, painting and assembly of machined components and purchased fasteners, seals, boots and brake linings.

The particulate emissions from the preheater, induction furnaces, shotblasters, inoculation, scrap & charge handling system, sand handling, grinders, and green sand muller are controlled by dust collectors. The particulate emissions from core machines, AISCO shakeout drum, molding machines, and a 789 paint spray booth are controlled by scrubbers. The particulate emissions from the remaining paint spray booths are controlled by filters. The VOC emissions from the paint spray booths exhaust uncontrolled.

The source is major in a PSD category (> 250 tons/year) with respect to particulate and VOC emissions. The source is also major (> 100 tons/year) with respect to CO emissions. The existing source has three paint spray booths and Regulation 401 KAR 61:132, Existing miscellaneous metal parts and products surface coating operations, is applicable to those spray booths. The existing spray booths were constructed in the year 1975 which is prior to the effective date of the PSD regulation. The company submitted additional information in which they advised us that they would like to install 22 cellular paint lines without increasing the VOC emissions. The cellular paint lines are subject to Regulation 401 KAR 59:225, New miscellaneous metal parts and products surface coating operations. The VOC emissions from the cellular paint lines (22) are limited to less than 40 tons per year. The total plant paint usage will increase but they have lowered the VOC content of the black paint (widely used) from 3.50 lbs/gallon to 0.30 lb/gallon. Since the company will utilize lower VOC content paint, the spray booths are exempt from the control equipment standard listed in Section 3 of this regulation which requires a minimum of 85% VOC control efficiency. Therefore, this Title V permit will include 22 cellular paint lines.

Compliance with Regulation 401 KAR 59:010, New process operations, is expected. The source potential emissions were provided by the applicant.